

What is claimed:

1. A method of raising and leveling a settled slab which comprises the steps of:

(a) mixing a quantity of lime and liquid into a viscous lime  
5 sludge;

(b) cutting a plurality of holes in said settled slab;

(c) pumping said lime sludge under said settled slab through  
said holes;

(d) leveling said settled concrete slab by controlling said  
10 pumping of said lime sludge pumped under said settled slab; and

(e) repairing said plurality of holes in the said slab.

2. A method of raising and leveling a settled slab as in claim 1  
wherein said lime sludge is an aqueous solution of an inorganic  
salt selected from the group consisting of calcium chloride,  
15 magnesium chloride, and aluminum sulfate.

3. A method of raising and leveling a settled slab as in claim 1  
wherein said slab is stabilized with a mixture of sand and air  
pumped beneath said slab so as to fill any voids.

4. A method of raising and leveling a settled slab as in claim 3  
20 wherein said plurality of holes are repaired with patch material  
of similar composition and appearance of said concrete slab.

5. A method of raising and leveling a settled slab as in claim 4  
wherein said slab is comprised of concrete.

6. A method of raising and leveling a settled slab which employs

the use of lime sludge as a lifting agent comprising the steps of:

(a) mixing a quantity of lime and liquid into a viscous lime sludge;

5 (b) cutting a plurality of holes in said settled slab;

(c) pumping said lime sludge under said settled slab at high pressure;

(d) raising and leveling said settled slab by controlling said pumping of said lime sludge pumped under said settled slab;

10 (e) pumping a mixture of air and sand beneath said raised and leveled slab; and

(f) repairing said plurality of holes in the said slab.

7. A method of raising and leveling a settled slab as in claim 6 wherein said mixture of sand and air pumped beneath said slab is  
15 used to fill any voids so as to stabilize said slab.

8. A method of raising and leveling a settled slab as in claim 7 wherein said mixture of air and sand is pumped under high pressure into said voids along the sides of said raised and leveled slab.

20 9. A method of raising and leveling a settled slab as in claim 8 wherein said plurality of holes are repaired with patch material of substantially the same composition and appearance of said concrete slab.

10. A method of raising and leveling a settled slab as in claim 9

wherein said slab is comprised of concrete. Concrete

11. A method of raising and leveling a settled concrete slab which employs the use of lime sludge as a lifting agent comprising the steps of:

5           (a) mixing a quantity of lime and liquid into a viscous lime sludge;

          (b) cutting a plurality of holes in said settled concrete slab;

          (c) pumping said lime sludge under said settled concrete  
10 slab at high pressure;

          (d) leveling said settled concrete slab by controlling said pumping of said lime sludge pumped under said settled concrete slab;

          (e) cutting a plurality of sand holes in said settled  
15 concrete slab;

          (f) pumping a mixture of air and sand beneath said settled concrete slab; and

          (g) repairing said plurality of holes in the said concrete slab.

20 12. A method of raising and leveling a settled concrete slab as in claim 11 wherein said concrete slab is stabilized with a mixture of sand and air pumped beneath said concrete slab into any voids.

13. A method of raising and leveling a settled concrete slab as

in claim 12 wherein said sand and air mixture is pumped into said voids through said sand holes.

14. A method of raising and leveling a settled concrete slab as in claim 13 wherein said plurality of holes are repaired with  
5 patch material of substantially the same composition and appearance of said concrete slab.

15. A method of raising and leveling a settled concrete slab as in claim 14 wherein said plurality of sand holes are repaired  
patch material of substantially the same composition and  
10 appearance of said concrete slab.